10/577.191 3/6/09

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17 Search history

INVENTOR SEARCH

=> d ibib abs hitstr 16 1-3

L6 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:726752 HCAPLUS Full-text

DOCUMENT NUMBER: 147:111976

TITLE: Reversine increases the plasticity of

lineage-committed mammalian cells

Chen, Shuibing; Takanashi, Shinichi; Zhang, AUTHOR(S):

Qisheng; Xiong, Wen; Zhu, Shoutian; Peters, Eric C.;

Ding, Sheng; Schultz, Peter G. Department of Chemistry and the Skaggs Institute for CORPORATE SOURCE:

Chemical Biology, The Scripps Research Institute, La

Jolla, CA, 92037, USA

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2007), 104(25), 10482-10487

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences DOCUMENT TYPE: Journal

LANGUAGE:

English Previously, a small mol., reversine, was identified that reverses lineagecommitted murine myoblasts to a more primitive multipotent state. Here, we show that reversine can increase the plasticity of C2C12 myoblasts at the single-cell level and that reversine-treated cells gain the ability to differentiate into osteoblasts and adipocytes under lineage-specific inducing conditions. Moreover, reversine is active in multiple cell types, including 3T3El osteoblasts and human primary skeletal myoblasts. Biochem. and cellular expts. suggest that reversine functions as a dual inhibitor of nonmuscle myosin II heavy chain and MEK1, and that both activities are required for reversine's effect. Inhibition of MEK1 and nonmuscle myosin II heavy chain results in altered cell cycle and changes in histone acetylation status, but other factors also may contribute to the activity of reversine, including activation of the PI3K signaling pathway.

656820-32-5, Reversine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) (reversine increases plasticity of lineage-committed mammalian cells)

RN 656820-32-5 HCAPLUS

9H-Purine-2,6-diamine, N6-cyclohexyl-N2-[4-(4-morpholinyl)phenyl]- (CA CN

INDEX NAME)

10/577.191 3/6/09

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:451560 HCAPLUS Full-text

DOCUMENT NUMBER: 142:478415

TITLE: Compositions and methods for inducing cell

dedifferentiation
INVENTOR(S): Chen, Shuibing; Ding, Sheng;

Schultz, Peter G.

PATENT ASSIGNEE(S): The Scripps Research Institute, USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT INFORMATIO

PATENT NO.										APPLICATION NO.								
WO	WO 2005047524 WO 2005047524				A2 200505				WO 2004-US37686						20041110			
***	W:	AE, CN, GE, LK, NO, TJ, BW, AZ,	AG, CO, GH, LR, NZ, TM, GH, BY,	AL, CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE,	AT, CZ, HU, LU, PH, TT, LS,	AU, DE, ID, LV, PL, TZ, MW, RU,	AZ, DK, IL, MA, PT, UA, MZ,	BA, DM, IN, MD, RO, UG, NA,	IS MG RU US SI AT	, BG, , EC, , JP, , MK, , SC, , UZ, , SL,	EE, KE, MN, SD, VC, SZ, BG,	EG, KG, MW, SE, VN, TZ, CH,	ES, KP, MX, SG, YU, UG, CY,	FI, KR, MZ, SK, ZA, ZM, CZ,	GB, KZ, NA, SL, ZM, ZW, DE,	GD, LC, NI, SY, ZW AM, DK,	
		SE,		SK,	TR,						, IT,							
	US 20050176707				A1 20050811				US 2004-985645 EP 2004-800997									
	R:	IE,		LT,							, IT,							
	2007 2007 TY API	75107 70254	52 884		A1					US US		5771 5189	91 47P		2 P 2		227 110	
OTHER SOURCE(S):					MARPAT 142:47841			15	i									

AB The present invention provides compns. and methods for dedifferentiating lineage committed mammalian cells.

IT 91-19-0D, Quinoxaline, derivs. 120-73-0D, Purine, derivs. 253-52-1D, Phthalazine, derivs. 253-82-7D, Quinazoline, derivs. 289-80-5D, Pyridazine, derivs. 10/577,191

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289-95-2D, Pyrimidine, derivs. 296-37-9D, Pyrazine, derivs.

RL: BSU (Biological study, unclassified); BIOL (Biological study) (compns. and methods for inducing cell dedifferentiation)

91-19-0 HCAPLUS RN

CN Quinoxaline (CA INDEX NAME)



RN 120-73-0 HCAPLUS

9H-Purine (CA INDEX NAME) CN



253-52-1 HCAPLUS RN

CN Phthalazine (CA INDEX NAME)



RN 253-82-7 HCAPLUS

CN Quinazoline (CA INDEX NAME)



289-80-5 HCAPLUS

CN Pyridazine (CA INDEX NAME)



RN 289-95-2 HCAPLUS

CN Pyrimidine (CA INDEX NAME)



RN 290-37-9 HCAPLUS

CN Pyrazine (CA INDEX NAME)



IT 325167-28-0 325167-35-9 709609-12-1 852231-90-4 852231-92-6 852231-94-8 852231-96-0 852231-98-2 852232-01-0 852232-03-2 852232-05-4 852232-07-6 852232-11-2 852232-15-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(compns. and methods for inducing cell dedifferentiation)

RN 325167-28-0 HCAPLUS CN 9H-Purine-2,6-diamine, N6-(cyclopropylmethyl)-N2-[4-(4-morpholinyl)phenyl]-

(CA INDEX NAME)

RN 325167-35-9 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-cyclopentyl-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 709609-12-1 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-ethyl-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX

NAME)

RN 852231-90-4 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-[1-[(4-methoxyphenyl)methyl]-4-piperidinyl]-N2[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 852231-92-6 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-[1-[[4-(dimethylamino)phenyl]methyl]-4-piperidinyl]-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

CN 9H-Purine-2,6-diamine, N2-[4-(4-morpholinyl)phenyl]-N6-[1-(2-phenylpropyl)4-piperidinyl]- (CA INDEX NAME)

- RN 852231-96-0 HCAPLUS
- CN 9H-Purine-2,6-diamine, N6-[1-[(2,3-dihydro-2-benzofuranyl)methyl]-4piperidinyl]-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

- RN 852231-98-2 HCAPLUS
- CN 9H-Purine-2,6-diamine, N6-[1-(2,2-diphenylethyl)-4-piperidinyl]-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

- RN 852232-01-0 HCAPLUS
- CN 9H-Purine-2,6-diamine, N6-(1,5-dimethylhexyl)-N2-[4-(4-morpholinyl)phenyl]-

(CA INDEX NAME)

RN 852232-03-2 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[2-[[4-(4-morpholinyl)phenyl]amino]-9H-purin-6-yl]amino]-, ethyl ester (CA INDEX NAME)

RN 852232-05-4 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-[2-(2-cyclohexen-1-yl)ethyl]-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 852232-07-6 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-(cyclohexylmethyl)-N2-[4-(4-morpholinyl)phenyl]-(CA INDEX NAME)

- RN 852232-11-2 HCAPLUS
- CN 9H-Purine-2,6-diamine, N6-(4-methoxyphenyl)-N2-[4-(4-morpholinyl)phenyl](CA INDEX NAME)

- RN 852232-13-4 HCAPLUS
- CN 9H-Purine-2,6-diamine, N2-[4-(4-morpholinyl)phenyl]-N6-(3-phenoxyphenyl)(CA INDEX NAME)

- RN 108-91-8 HCAPLUS
- CN Cyclohexanamine (CA INDEX NAME)



- RN 1651-29-2 HCAPLUS
- CN 9H-Purine, 6-chloro-2-fluoro- (CA INDEX NAME)



- RN 2524-67-6 HCAPLUS
- CN Benzenamine, 4-(4-morpholinyl)- (CA INDEX NAME)



- RN 852231-88-0 HCAPLUS
- CN 9H-Purin-6-amine, N-cyclohexyl-2-fluoro- (CA INDEX NAME)



- IT 656820-32-5P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (compns. and methods for inducing cell dedifferentiation)
- RN 656820-32-5 HCAPLUS
- CN 9H-Purine-2,6-diamine, N6-cyclohexyl-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:996204 HCAPLUS Full-text

DOCUMENT NUMBER: 140:160988

TITLE: Dedifferentiation of Lineage-Committed Cells by a

Small Molecule

AUTHOR(S): Chen, Shuibing; Zhang, Qisheng; Wu, Xu;

Schultz, Peter G.; Ding, Sheng

CORPORATE SOURCE: Department of Chemistry and the Skaggs Institute for Chemical Biology, The Scripps Research Institute, La

Jolla, CA, 92037, USA

SOURCE: Journal of the American Chemical Society (2004),

126(2), 410-411

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Combinatorial libraries were screened for mols. that induce mouse myogenic lineage committed cells to dedifferentiate in vitro. A 2,6-disubstituted purine, reversine, was discovered that induces lineage reversal of C2C12 cells to become multipotent progenitor cells which can redifferentiate into osteoblasts and adipocytes. This and other such mols. are likely to provide new insights into the mol. mechanisms that control cellular dedifferentiation

and may ultimately be useful to in vivo stem cell biol. and therapy. IT 656820-32-5, Reversine

RL: BSU (Biological study, unclassified); BIOL (Biological study) (dedifferentiation of lineage-committed cells by small mol. reversine)

RN 656820-32-5 HCAPLUS

CN 9H-Purine-2,6-diamine, N6-cyclohexyl-N2-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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RESULTS FROM REGISTRY, CAPLUS, AND USPATFULL

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L18 131 SEA FILE=REGISTRY SSS FUL L16

L22 15 SEA FILE=REGISTRY ABB=ON L18 AND NR=4 AND NRS=3

L23 3 SEA FILE=REGISTRY ABB=ON L22 AND N=6

L24 1 SEA FILE=HCAPLUS ABB=ON L23 L25 1 SEA FILE=USPATFULL ABB=ON L23

T.26 2 DUP REMOV L24 L25 (0 DUPLICATES REMOVED)

=> d ibib abs hitstr 126 1-2

L26 ANSWER 1 OF 2 USPATFULL on STN

2003:184082 USPATFULL Full-text ACCESSION NUMBER:

TITLE: Purine derivatives inhibitors of tyrosine protein

kinase SYK

INVENTOR(S): Collingwood, Stephen Paul, Horsham, UNITED KINGDOM

Hayler, Judy, Horsham, UNITED KINGDOM

Le Grand, Darren Mark, Horsham, UNITED KINGDOM

Mattes, Henri, Brunstatt, FRANCE

Menear, Keith Allan, Horsham, UNITED KINGDOM Walker, Clive Victor, Horsham, UNITED KINGDOM

Cockcroft, Xiao-Ling, Horsham, UNITED KINGDOM KIND DAME

PATENT ASSIGNEE(S): Novartis AG, Basel, SWITZERLAND (non-U.S. corporation)

	NUMBER	KTND	DATE	
PATENT INFORMATION:	US 6589950	B1	20030708	
	WO 2001009134		20010208	
APPLICATION INFO.:	US 2002-48577		20020319	(10)
	WO 2000-EP7311		20000728	

NUMBER

		NUMBER	DATE
PRIORITY	INFORMATION:	GB 1999-18035	19990730
DOCUMENT	TYPE:	Utility	

10/577,191 3/6/09

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Berch, Mark L.

LEGAL REPRESENTATIVE: Lopez, Gabriel, Dohmann, George R.

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 1895

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are compounds of the formula ##STR1##

in free or salt form, wherein X, R.sup.1, R.sup.2, R.sup.3, and R.sup.4 are as defined in the specification, their preparation and their use as pharmaceuticals, particularly for the treatment of inflammatory or obstructive airways disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 325166-09-4P 325166-51-6P 325166-64-1P

(target compound; preparation of anilinopurine tyrosine protein kinase syk inhibitors by addition of anilines and amines, alcs., or thiols to dichloropurines)

RN 325166-09-4 USPATFULL

CN 9H-Purin-2-amine, 6-ethoxy-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

RN 325166-51-6 USPATFULL

RN 325166-64-1 USPATFULL

CN 9H-Purin-2-amine, 6-(ethylthio)-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

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L26 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:101141 HCAPLUS Full-text
DOCUMENT NUMBER: 134:163051

TITLE: Preparation of anilinopurine derivatives as inhibitors of tyrosine protein kinase syk

INVENTOR(S): Collingwood, Stephen Paul; Hayler, Judy; Le Grand,

Darren Mark; Mattes, Henri; Menear, Keith Allan; Walker, Clive Victor; Cockcroft, Xiao-ling

PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft M.B.H.

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

				KIND DATE			APPLICATION NO.						DATE					
	WO 2001009134								WO 2000-EP7311						20000728			
WO	W: AE, AG, AL,												D7					
	v										5, EG, 5, FI,							
											, KR,							
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				LT,			RO,											
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	2002						2003				2002-					0020		
MX	2002	0011	02		A		2002			MX	2002-	1102			2	0020	130	
	6589						2003				2002-					0020		
JP	2007	2174	26		Α		2007	0830		JΡ	2007-	1306						
PRIORIT	Y APP	LN.	INFO	. :											A 19990730			
										JΡ	2001-	5143	37		A3 2	0000	728	
										WO	2000-	EP73	11	1	N 2	0000	728	

OTHER SOURCE(S): MARPAT 134:163051

GI

- AB The title compds. (I) [wherein X = O, S, or NR5; Rl = (un)substituted (cyclo)alkyl, alkenyl, benzocycloalkyl, cycloalkylalkyl, or aralkyl; R2, R3, and R4 = independently H, halo, (halo)alkyl, alkoxy, carboxy, alkoxycarbonyl (alkyl), crarboxyalkyl, or (un)substituted amino, sulfamoyl (alkyl), or carboxyalkyl, or two of R2, R3, and R4 form a carbocyclic or heterocyclic ring together with the C atoms to which they are attached; R5 = H or alkyl] in free or salt form were prepared for use as pharmaceuticals, particularly for the treatment of inflammatory or obstructive airways disease. For example, cyclopropylamine and N,N-diisopropylethylamine were added to 2,6-dichloropurine was stirred with 4-morpholinoaniline in the presence of N,N-diisopropylethylamine in NMF at 130°C for 48 h to give II, which inhibited phosphorylation by syk kinase with an IC50 of 9 nM.
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (target compound; preparation of anilinopurine tyrosine protein kinase syk inhibitors hy addition of anilinopurine tyrosine protein kinase syk inhibitors hy addition of anilinos and amines, alcs, or thinks to

(target compound; preparation or aniinnopurine tyrosine protein kinase sylinhibitors by addition of anilines and amines, alcs., or thiols to dichloropurines)

- RN 325166-09-4 HCAPLUS
- CN 9H-Purin-2-amine, 6-ethoxy-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

- RN 325166-51-6 HCAPLUS
- CN 9H-Purin-2-amine, 6-[(1-methylethyl)thio]-N-[4-(4-morpholinyl)phenyl]-(CA INDEX NAME)

RN 325166-64-1 HCAPLUS

CN 9H-Purin-2-amine, 6-(ethylthio)-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SEARCH HISTORY

L24

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=> d his ful
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               E DING SHENG/AU
T.2
            126 SEA ABB=ON "DING SHENG"/AU
               E SCHULTZ PETER G/AU
L3
            475 SEA ABB=ON "SCHULTZ PETER G"/AU
              5 SEA ABB=ON L1 AND L2 AND L3
L4
               SELECT RN L4 4
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               2524-67-6/BI OR 253-52-1/BI OR 253-82-7/BI OR 289-80-5/BI OR
               289-95-2/BI OR 290-37-9/BI OR 325167-28-0/BI OR 325167-35-9/BI
               OR 656820-32-5/BI OR 709609-12-1/BI OR 852231-88-0/BI OR
               852231-90-4/BI OR 852231-92-6/BI OR 852231-94-8/BI OR 852231-96
               -0/BI OR 852231-98-2/BI OR 852232-01-0/BI OR 852232-03-2/BI OR
               852232-05-4/BI OR 852232-07-6/BI OR 852232-11-2/BI OR 852232-13
               -4/BI OR 91-19-0/BI)
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1.6
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               D IBIB ABS HITSTR L6 2
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T.7
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L8
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               D SCAN
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L9
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L11
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L12
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L13
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L14
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L15
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L16
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L17
             3 SEA SSS SAM L16
L18
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L19
            17 SEA ABB=ON L18 AND N=6
L20
             10 SEA ABB=ON L19 AND O=1
             0 SEA ABB=ON L20 AND C=15
L21
               D L20 1-10
             15 SEA ABB=ON L18 AND NR=4 AND NRS=3
L23
             3 SEA ABB=ON L22 AND N=6
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FILE 'HCAPLUS' ENTERED AT 17:28:01 ON 06 MAR 2009

1 SEA ABB=ON L23

3/6/09

FILE 'USPATFULL' ENTERED AT 17:28:12 ON 06 MAR 2009 1 SEA ABB=ON L23

FILE 'HCAPLUS, USPATFULL' ENTERED AT 17:28:25 ON 06 MAR 2009 L26 2 DUP REMOV L24 L25 (0 DUPLICATES REMOVED)

FILE HOME

T.25

FILE HCAPLUS

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FILE COVERS 1907 - 6 Mar 2009 VOL 150 ISS 11 FILE LAST UPDATED: 5 Mar 2009 (20090305/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 MAR 2009 HIGHEST RN 1116197-74-0 DICTIONARY FILE UPDATES: 5 MAR 2009 HIGHEST RN 1116197-74-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 5 Mar 2009 (20090305/PD)
FILE LAST UPDATED: 5 Mar 2009 (20090305/ED)

HIGHEST GRANTED PATENT NUMBER: US7500272

HIGHEST APPLICATION PUBLICATION NUMBER: US20090064384

10/577,191 3/6/09

CA INDEXING IS CURRENT THROUGH 5 Mar 2009 (20090305/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 5 Mar 2009 (20090305/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2008
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2008

USPATFULL now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.